

**LPDES PERMIT NO. LA0122882, AI No. 126092****LPDES STATEMENT OF BASIS****FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA**

- I. Company/Facility Name:** Bionol, LLC  
627 N. Parkerson  
Crowley, LA 70526
- II. Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313
- III. Prepared By:** Jenniffer Sheppard  
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**Date Prepared:** April 17, 2007

**IV. Permit Action/Status:****A. Reason For Permit Action:**

First time issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46\*.

- \* In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

- B. NPDES permit -** NPDES permit effective date: N/A  
NPDES permit expiration date: N/A

EPA has not retained enforcement authority.

- C. LPDES permit -** LPDES permit effective date: N/A  
LPDES permit expiration date: N/A

- D. Application received on March 9, 2007**

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**V. Facility Information:**

- A. Location - 409 Port Road in Lake Providence
- B. Applicant Activity -

According to the application, Bionol, LLC, is a proposed fuel grade ethanol facility and manufactures denatured fuel grade ethanol using corn, regular gasoline for denaturant, and water as raw materials.

The corn is proposed to be prepared by a dry milling process. The starch in the corn will then be converted into sugar by an enzyme process and fermented by yeast into ethanol. The ethanol will be removed by distillation and dehydrated by a mol sieve and subsequently sold. The solids are proposed to be concentrated by centrifuge and dried before being sold as distillers dried grain with solubles (DDGS).

All sanitary and process wastewater are proposed to discharge to the Town of Lake Providence wastewater treatment system, under LPDES permit LA0020486.

Stormwater is covered under the Multi-Sector General Permit (MSGP), LAR05N622, effective on May 25, 2006.

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903)

Ethanol Production (SIC Code 2869) is generally covered under the Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) Guideline at 40 CFR 414, Subpart F. However, in accordance with the General Provisions located at 40 CFR 414, Subpart A, the provisions of those guidelines do not apply to any process wastewater discharges from the manufacture of organic chemical compounds solely by the extraction from plant and animal raw materials or by fermentation processes. Since the discharges from Bionol would fall under this category, the OCPSF Guidelines are not applicable.

All process wastewater is proposed to discharge to the Town of Lake Providence wastewater treatment system, under LPDES permit LA0020486.

There are no applicable guidelines for the utility wastewaters discharges from Bionol at this time.

Other sources of technology based limits:

LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).  
 Best Professional Judgement

- D. Fee Rate -
- |                              |  |
|------------------------------|--|
| 1. Fee Rating Facility Type: | minor  |
| 2. Complexity Type:          | II, BPJ due to all process discharges going to the Town of Lake Providence and being discharged under LPDES Permit, LA0020486. |
| 3. Wastewater Type:          | III  |
| 4. SIC code:                 | 2869   |

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E. Continuous Facility Effluent Flow - 0.65664 MGD.

**VI. Receiving Waters:** Mississippi River via an effluent pipe

1. River Basin: Mississippi River, Segment No. 070101

2. Designated Uses:

The designated uses are primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

**VII. Outfall Information:**

Outfall 001

- A. Type of wastewater - utility wastewaters including scrubber water, boiler blowdown, cooling tower blowdown, filter backwash, and RO reject water; and previously monitored non-process area stormwater runoff (monitored under LPDES Permit, LAR05N622).
- B. Location - at the point of discharge prior to commingling with the Mississippi River at Latitude 32°44'5", Longitude 91°08'56".
- C. Treatment of utility wastewaters consists of: None
- D. Flow - (Estimated Flow) 0.65664 MGD.
- E. Receiving waters - Mississippi River via an effluent pipe
- F. Basin and segment - Mississippi River Basin, Segment 070101

**VIII. Permit Limit Rationale:**

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two.

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1. Outfall 001 - utility wastewaters including scrubber water, boiler blowdown, cooling tower blowdown, filter backwash, and RO reject water; and previously monitored non-process area stormwater runoff (monitored under LPDES Permit, LAR05N622).

Utility wastewaters being discharged to discrete outfalls receive BPJ limitations/monitoring requirements according to the following schedule:

<b><u>PARAMETER</u></b>	<b><u>MONTHLY AVERAGE</u> <u>mg/L</u></b>	<b><u>DAILY MAXIMUM</u> <u>mg/L</u></b>
Flow (MGD)	Report	Report
TOC	N/A	50
Oil and Grease	N/A	15
pH (Std. Units)	6.0 (min)	9.0 (max)

**Site-Specific Consideration(s)**

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

PH - established in accordance with LAC 33:IX.1113.C.1.

TOC and Oil & Grease - These limitations have been established in accordance with similarly permitted discharges and Best Professional Judgment.

C. **WATER QUALITY**

The following pollutants received water quality based effluent limits:

<b><u>POLLUTANT(S)</u></b>
None

**TMDL Waterbodies**

**Outfall 001**

The discharges from Outfall 001 include utility wastewaters including scrubber water, boiler blowdown, cooling tower blowdown, filter backwash, and RO reject water; and previously monitored non-process area stormwater runoff (monitored under LPDES Permit, LAR05N622) are to Mississippi River via an effluent pipe, Segment No. 070101. The Mississippi River is not listed on the 303(d) report as being impaired for any pollutant. Therefore, no additional requirements were added to this proposed permit.

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**D. MONITORING FREQUENCIES**

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.1./40 CFR 122.44(1)]. The following section(s) explain the rationale for the monitoring frequencies stated in the draft permit.

1. Outfall 001 - utility wastewaters including scrubber water, boiler blowdown, cooling tower blowdown, filter backwash, and RO reject water; and previously monitored non-process area stormwater runoff (monitored under LPDES Permit, LAR05N622).

Flow, TOC, Oil & Grease, and pH - A monitoring frequency of 1/month for these pollutant are considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7.

<b><u>PARAMETER</u></b>	<b><u>MONITORING FREQUENCY</u></b>
Flow	1/month
TOC	1/month
Oil & Grease	1/month
pH	1/month

**IX. Compliance History/DMR Review :**

<b><u>DATE</u></b>	<b><u>OUTFALL</u></b>	<b><u>PARAMETER</u></b>	<b><u>REPORTED VALUE</u></b>	<b><u>PERMITTED VALUE</u></b>
N/A	N/A	N/A	N/A	N/A

NONE, PROPOSED FACILITY

**X. "IT" Questions - Applicant's Responses**

It Questions and Bionol, LLC's responses can be found in the LPDES Permit Application Submittal dated March 12, 2007.

**XI. ENDANGERED SPECIES**

The receiving waterbody, Subsegment 070101 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon and Fat Pocketbook, which are listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated 9/29/06 from Watson (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon and Fat Pocketbook. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. The more stringent of technology and water quality based limits (as applicable) have been applied to ensure maximum protection of the receiving water.

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**XII. Historic Sites:**

The discharge will be from a proposed facility. LDEQ has consulted with the State Historic Preservation Officer (SHPO) in a letter dated March 16, 2007 to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. LDEQ has not received any comments from SHPO. Therefore, in accordance with the "Memorandum of Understanding (MOU) for the Protection of Historic Properties in Louisiana Regarding LPDES Permits," if no comments are received by LDEQ within the 30-day comment period, the LDEQ may consider that the SHPO has waived the right to provide comments, and the LDEQ may proceed with the permitting action.

**XIII. Tentative Determination:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

**XIV. Variances:**

No requests for variances have been received by this Office.

**XV. Public Notices:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List